

Environmental Education and Communication Inventory in Guinea

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EXECUTIVE SUMMARY

A variety of national efforts, programs, and international development projects on Environmental Education and Communication (EE&C) are being or have been recently developed in Guinea. The Guinea National Environmental Action Plan (NEAP) has attempted to address communication and education issues although the government bodies established to deal with environmental questions have not yet shown the necessary leadership or capacity to develop, let alone manage and direct EE&C strategies. There appears, however, to be a strong willingness on the part of key ministries, such as the Ministry of Pre-university Education and Professional Training (MEPU/FP0, and their directorates, to use rural radio to promote EE&C objectives and community involvement in EE&C activities.

Those international organizations that seem to be moving most directly on EE&C questions are UNICEF (environmental health, urban sanitation) and the European Community (the PACIPE program, and its contribution to watershed, forest and rural resource conservation). USAID, GTZ and the FAC among other donors and developmental organizations, are involved but have not finalized their own strategies.

This exploratory trip had several objectives:

- To conduct an inventory of EE&C activities in Guinea;
- To examine how EE&C strategies might be developed in certain of USAID/Conakry's projects, especially those dealing with natural resources;
- To see where USAID/Conakry's projects might benefit from systematic application of EE&C efforts within the country;
- To explore how the different Mission offices might collaborate on several elements that help to build solid EE&C strategies for specific local, regional, or national EE&C projects in Guinea.

The inventory allows an identification of opportunities for the USAID Mission to work with other organizations and to develop its own strategy in this area.

An EE&C strategy seems necessary, given the variety of efforts linked to environmental questions and educational components within the USAID/Conakry Natural Resource Management (NRM) project, as well as within the multiplicity of projects depending on other donors and organizations. There is a need to show that a coherent and effective approach is possible, taking into account previous experience and training and future common objectives.

A first recommendation for an EE&C intervention would be to start with one or two watersheds at CRD level, and progressively expand to larger geographical areas and a greater number of resource users. An example would be the Fouta Djallon Highlands development program supported by USAID.

A second recommendation for EE&C intervention is based on USAID/Conakry's interests through its other offices (GDO and HRDO), as expressed in Guinea's NEAP. Priority sectors are

environmental health education and efforts to focus on Guinean women's very real contribution to environmental management in the home and in the community.

Finally, if EE&C strategies prove their efficacy, other sectors and themes might be addressed. Criteria for selection of other thematic areas would be their appearance in the NEAP priority list; a history of earlier work and involvement by local populations and organizations; opportunities for business or small enterprise development. Such themes for mobilizing populations at a local level and sometimes at the national level (depending on the strategy) could be:

- Urban solid waste management and water pollution control in Conakry
- Improved woodstoves, or other appropriate technologies in general
- Eco-tourism
- Marine Pollution
- Coastal zone and maritime resource management
- Training of NGO and government staff in EE&C/capacity-building activities
- National Awareness campaigns.

Rural radio is proposed as an important element in all these recommendations for developing EE&C strategies because it has become an excellent two-way communication tool in Guinea. USAID/Conakry Mission's GDO, which had as one of its mandates to build up the "IEC" (Information, Education, and Communication) components of projects, may thereby have an opportunity to collaborate more closely with either RDO or HRDO. It appears that an EE&C approach, in the form of the GreenCOM project, may be key to supporting this initiative.

For several reasons, USAID could position itself well at the forefront of an "environment" program area. Certain well-chosen projects could serve as models for using IEC know-how and technology. First, USAID is, or will be, applying an environmental perspective and approach in all of its project sectors; second, it is, or will be, applying this perspective and approach within its own organization (such as trying to encourage and develop IEC components in all project areas, while also helping to invest in the development of this technological area with a "rural radio program"). Indeed, USAID/Conakry could be seen as being at the forefront of EE&C approaches.

ACRONYMS

BRP	Bassin Représentatif Pilote
CENAFOD	Centre Africain de Formation pour le Développement
CRAFEE	Centre de Recherche-Action-Formation en Education à l'Environnement
CRD	Communauté Rurale de Développement
DPDRE	Direction Préfectorale pour le Développement Rural et l'Environnement
DNFC	Direction Nationale de la Forêt et de la Chasse
DNRST	Direction Nationale de la Recherche Scientifiques et Technique
DPE	Direction Préfectorale de l'Education
EC	European Community
EE&C	Environmental Education and Communication
FED	Fond Européen pour le Développement
GDO	General Development Office (USAID/Conakry)
GERF	Gestion de l'Espace Rural et des Forêts
GOG	Government of Guinea
HRDO	Human Resources Development Office (USAID/Conakry)
IEC	Information, Education, Communication
IPN	Institut Pédagogique National
IRE	Inspection Régionale de l'Education
LPDA	Lettre de Politique du Développement Agricole
MARA	Ministère de l'Agriculture et des Ressources Animales
M&E	Monitoring and Evaluation
MEPU/FP	Ministère de l'Enseignement Pré-Universitaire et de la Formation Professionnelle
NEAP	National Environmental Action Plan
NGO	Non-governmental Organization
NRM	Natural Resource Management
PACIPE	Programme d'Appui à la Communication et à l'Information sur la Protection de l'Environnement.
PASE	Programme d'Ajustement Sectoriel de l'Education
PCV	Peace Corps Volunteer
PRA	Participative Rural Appraisal
RDO	Research and Development Office (USAID/Conakry)
RTV	Recherche, Technology, Vulgarisation (Guinea NEAP component)
SCIO	Service de Coordination des Interventions des ONGs
SNA	Service National d'Alphabétisation
SOW	Statement of Work
TO	Training Office (USAID/Conakry)

SECTION I

ENVIRONMENTAL EDUCATION AND COMMUNICATION IN GUINEA

A. The Consultancy Statement of Work

The objectives of this consultancy were to provide an inventory of existing environmental education and communication (EE&C) activities and opportunities; and to assess the existing status, need, and potential of various EE&C activities and interventions.

Focusing on the activities and objectives of the USAID/Conakry Natural Resource Management (NRM) Project, this inventory includes a description of:

- Major EE&C activities regarding local education, extension, and mass media activities;
- Major EE&C opportunities including specific mention as to the feasibility of potential local institutional and individual collaborators (public and private);
- Major themes which have the potential to further NRM project objectives with special reference to indigenous cultural values and norms which might be useful to address in EE&C campaigns;
- Possible strategies and unifying themes and symbols for implementing EE&C campaigns.

B. Summary of Events and Limitations

During the first week of the three week consultancy, initial contacts were made in the USAID/Conakry Mission, especially with RDO, but also with the other offices and personnel; and then in Conakry with various ministries and organizations. A visit to the Labé headquarters of the Guinea-NRM Project was planned for the following week. During the third and last week, final interviews and data gathering was completed. Regular contact USAID's other offices (GDO, HRDO) allowed examination of other USAID/Conakry projects.

The detailed results of NEAP's recent RTV survey and the Education and Sensitization Support Programs Evaluation were unavailable. Extrapolation from some of the most pertinent themes was made by follow-up visits and interviews with key agencies and individuals (DNRST, Commission UNESCO, Guinée Ecologie, DNE, Ministère de l'Industrie).

It was not the mandate of this trip to conduct in-depth evaluations on the existing EE&C projects or project components. Rather, this trip report provides a broad overview of EE&C activities within USAID/Conakry programs and within Guinea in general.

At the time of the consultant's visit to the NRM/USAID project headquarters in Labé, not all project team members were available. Nevertheless, those persons most concerned with EE&C activities were present.

The RDO director's availability was lessened because of the recent departure of the person previously responsible for the NRM watershed project. Despite his heavy workload, the RDO director was able to meet three times with the consultant to allow for suggestions and specifications for serving USAID/Conakry's project needs.

SECTION II

INVENTORY OF ORGANIZATIONS AND RESOURCES FOR ENVIRONMENTAL EDUCATION AND COMMUNICATION

A. Context: the Importance Given to Rural and Forest Resources

According to one source, "agriculture is the primary industry in Guinea; about 80 percent of the population is rural based and agriculture and livestock account for 45 percent of Guinea's GDP and 6 percent of export earnings (1988)" (Project Paper: Natural Resources Management Project. USAID/Conakry. September 1991:15).

Guinea still possesses important renewable natural resources: 6.2 million hectare of tillable land (dry or wet farming), of which only 30 percent is in fact farmed; 13,2 million hectare of forests (50 percent of the country), and important potential pastoral areas. Despite these resources, Guinea is faced with important constraints which may, in the short-, medium-, and long-term, increase the degradation of its natural resource potential. Among these constraints are unregulated exploitation of resources (deforestation, poor management of forests, inefficient use of wood fuels, uncontrolled brush fires, overuse of soils leading to their impoverishment and erosion, etc.); lack of interest of local populations in protecting forest or coastal areas; the inexperience of young governmental and non-governmental organizations; and lack of coordination among projects.

Legislation in Guinea is well-developed, although its adaptation and specific regulations and enforcement mechanisms have yet to be established in many sectors and parts of the country. National policies and programs also are being developed, including the Plan d'Action Forestier Guinéen (PAFG), conceived in 1988 and brought up to date in 1992; the Lettre de Politique de Développement Agricole (LPDA) produced by the MARA; and now the Plan National d'Action Environnementale (PNAE), whose priority action plans are in the final stages.

In terms of one natural region, the Fouta Djallon Highlands, one of the major constraints to improving the management of natural resources for sustainable agricultural production has been identified as the "degradation of biophysical resources" (Project Paper: Natural Resources Management Project. USAID/Conakry. September 1991:15).

Several projects have been or are being set up within the GOG that touch directly on NRM issues and objectives (PNGRR, NRM/USAID, EEC, GTZ). The costs of these projects vary widely: PNGRR, \$31.3 million; NRM/USAID, \$1.5 Million, (cf. UNDP 1991 Report on Guinea; and tables are in preparation, under the DNFC's coordination office, for the NEAP/World Bank report).

The experience and analyses around many watershed conservation and development projects in Haute and Moyenne Guinée natural regions have helped to reinforce thinking and actions around *terroirs villageois*. Such projects however often lack coordination despite the need for global and sustainable management of resources at the regional and local levels.

B. The Inventory

The inventory conducted by this consultant was broad, given that no clear mandate had been established and enforced to date by the GOG with regards to environmental questions and EE. The NEAP has yet to be finalized and the new government has yet to be formed by the country's elected president. This inventory included both governmental and non-governmental organizations working with national budgets or with international funding, those directly involved in environmental issues and implementing agencies. The reason for this is that an EE&C approach applies not only to the environmental actors (specialists, professionals working directly on the environment or with other people who do so) but also to those people and entities through which environmental information can be transferred. Because the inventory was broad, only those organizations which had apparently worked on EE&C or had the potential of doing so were examined in depth.

Synthesis of Findings from the Inventory

Generally, during the three weeks of this mission, there seemed to be inherent tensions between policy makers and implementors. There is, however, an expressed need from all parties for environmental awareness and appropriate agricultural techniques (and EE&C) for each natural resource region (cf. the NEAP "white paper"). Relatively little has been done in the EE&C area and that only sporadically. Besides the pressures on each project and their personnel, a major constraint is the difficulty in communicating—let alone coordinating—among the different projects. A multitude of efforts, experience, and potential around EE&C exist within Guinea, and such efforts require greater coherence and better coordination. Changes in philosophical and technical approaches to development also affect coordination.

There seems to be a general lack of internal logic between programs, reflected by different technical viewpoints. An example would be agricultural or forest production on the one hand and protection or conservation on the other. Also, there has been a recent change regarding the role and function of the forest agent (*cadre forestier*). More and more, these agents are seen as facilitators (*animateur*) and educators. However, the capacity to design and implement participative approaches in which these facilitators would serve, seem to be lacking.

Communication is hampered by lack of transportation infrastructure and means (vehicles), which often translates into loss of motivation among government personnel, and difficulty in encouraging follow-up activities and evaluations around projects and capacity-building programs.

Coordination bodies for development operations are fledgling both at central and regional levels. There are apparently a few noteworthy exceptions, such as Rural Radio, the DNFC, and the IPN. One of the principle objectives of the LPDA and the NEAP is to respond to coordination needs by developing intersectoral dialogue and planning at the regional and central levels.

Training for communication is an area of possible intervention. Both NGO and government have expressed an interest in training and obvious gaps in communication expertise have already been cited.

Social marketing techniques and other strategies utilizing mass media to raise awareness levels, have also received interest from Guinean institutions and is an area that could be fruitfully pursued by USAID.

Finally it seems to be evident from available reports that qualitative research, and use of research as a communication tool is still very primitive. Pre-testing of materials, communication evaluations and pre-programmatic message development research on behavior is not yet being systematically implemented in EE&C programs.

Finally, the application of EE&C to private enterprise development and to democratic initiatives does not seem to be a priority. This may be short-sighted.

A major program with the European Community has been in development for the past few years on communication and information for environmental protection (PACIPE) geared to coastal West African countries. USAID's GreenCOM project may have a more country-focused approach, but both efforts (GreenCOM and PACIPE) could benefit from some form of cooperation.

C. Governmental Organizations

The government has translated its policy of decentralization within the last few years by gradually establishing three levels of administration: regional, prefectural, and communal. Each structure has included environmental mandates, but they remain vague or operationally unsupported.

- ***Regional Administration.***—Headed by a regional governor, one of this level's administrative and technical services is the Inspection Régionale de l'Agriculture, des Ressources Animales et de l'Environnement, which essentially acts as a counselling body for the governor. This council is dependent on information flowing up from the Directions Préfectorales du Développement Rural et de l'Environnement (DPDRE).
- ***Prefectoral Administration***—The Agents de Développement Rural (ADR) represent the DPDRE at the most decentralized level of the Ministry of Agriculture and Animal Resources (MARA).
- ***Communal Administration***—Communautés Rurales de Développement (CRD) are gradually being established to provide local rural communities with real responsibilities, such as the definition of their own development priorities and activities.

D. Non-Governmental Organizations

More than 100 officially recognized national and international NGOs exist in Guinea at the present time. They are identified within the Service de Coordination des Interventions des ONG

(SCIO). The PVO-NGO/NRMS Project also has identified those local NGOs that specialize in natural resource management. A document was produced in March 1993, listing and describing these NGOs (see Annex B). This document is still a good reference and for this reason, these environmental NGOs were not examined systematically and in depth during this trip. Additional information was gathered from various sources, however, including interviews where questions were fielded as to which local NGOs were more or less capable of intervening in the field in the area of environmental protection and/or EE&C.

The environmental NGOs have not yet managed to organize themselves as a coherent or coordinated body (such as a federation), although efforts are underway to do so for the purpose of becoming a valid party in future negotiations with international donor agencies. An effort is underway to encourage and help a certain number of NGOs to organize themselves into both informal and formal associations, with or without the support of official structures (such as the SCIO). These NGOs represent a potentially efficient means for helping projects in the areas of training, research, evaluation and counselling. But their own capacities must be developed through systematic and regular in-country or regional training programs. The HRDO section of USAID/Conakry (in conjunction with its Training Office) has already been involved in such efforts.

E. USAID/Conakry

Identification of Existing or Potential USAID/Conakry Projects for EE&C

The various offices of the USAID/Conakry Mission are, or may become, involved either directly or indirectly in different components and themes concerning EE&C. Indeed, it appeared that environment and education were totally cross-sectoral (RDO, GDO, and HRDO), while health questions were partially cross-sectoral (RDO and HRDO). A tentative list of potential offices/projects for EE&C activities includes:

- **RDO**—NRM Project: for development of local EE&C activities, competencies, and strategies.
- **GDO**
 - * Communication (IEC) Support: support of rural radio development and programming activities.
 - * Health Project (population control). Some operational elements of this project may contribute to EE&C strategy goals, especially in the area of rural radio support.
- **HRDO**
 - * Development of environment, population, and health issues within primary school curricula.

- * Education for women in the environment.
 - * Education within the context of urban sanitation.
- **TO**—Training of groups of NGO's (on planning), in collaboration with HRDO.

In addition to these projects germane to USAID interests, a country-wide inventory was made of other organizations and EE&C projects, past, present and future. The context and inventory was completed as the consultant proceeded to meet project managers within and outside USAID.

Efforts Using Rural Radio in USAID Projects

In each of its projects, the Mission is investigating the possibility of integrating IEC. In the rural radio program a team (composed of Robert Eiger who worked as head of PSI in Guinea and who is now in Ivory Coast; Michael Laflin from LearnTech, contracted out from A.I.D./Washington; and Bernard Feller, who developed rural radio in Guinea) arrived in October 1993 to assess the potential of rural radio, and produced a report. Their next step was to determine the relationships within the Ministry of Communication. They found that PSI uses rural radio the most; and within HRDO, rural radio is used mainly for information dissemination.

In the content area of radio programming, GDO is looking into the possibility of involving IRI (Interactive Radio Instruction), a program used by USAID in different countries, but especially successful in Kenya.

RDO is trying to use rural radio for land tenure projects but apparently this has not been successful, largely because of USAID/Conakry's difficulty in acquiring a "media specialist".

SECTION III

RECOMMENDATIONS AND SUGGESTED STRATEGIES

A. General Recommendations

1. Develop EE&C Strategies

A strategy is necessary to ensure that interactive processes, roles, and functions set up during a project last beyond the predetermined project period. Sustainability occurs because of effective technology transfer and education or creation of business plans or successful community mobilization, during the project life.

If the projects are to have continuity beyond the end of their funding—that is, if such efforts are to be lasting and generalized—some form of support is necessary with ministries involved and their local representatives; with local populations; and with local or national NGOs.

Theoretically, support should come automatically as local government agents assume the continuity of the job in collaboration with the local populations. But for this, some form of transfer of technology, of information, and of know-how must have occurred. People at the local level need to know how to use these support materials and information. In addition organizational systems need to be in place through which the above takes place.

National government networks must be convinced of the usefulness of the material. It is the national government that can attract and allocate development monies or credits to priority programs, and it is the same national government that can mobilize its networks of government agents (such as the education ministry, MEPU/FP, or the DNFC). For this reason, the relevant ministries must be involved in the know-how and methods developed and transferred.

EE&C efforts can have a broader impact because of the presence of the various government bodies at the local level regionally as well as nationwide. But to achieve this impact, it is necessary to work closely and to train these government representatives, at the different levels, in the various aspects of EE&C strategy.

All of the recommendations in this report are project-driven. But support at all levels must be examined in light of the possible future restructuring of governmental organizations (the highest level of involvement with the GOG should be at the Directorate level).

Regarding EE&C components, and those linked specifically to NRM watershed projects, questions should be asked as to whether or not environmental know-how and information is being addressed; by whom; and in which ministries or services.

Know-how and information eventually should be written down and published in the form of a guide. The NRM-Guinea team already has begun to produce such materials,

especially in the form of information sheets intended for local population groups (see Annex B for references of examples).

Normally, within each préfecture one government agent should be manning the environment section of the DPDRE (Direction Préfectorale du Développement Rural et de l'Environnement) who represents, at the local level, the DNE. But to encourage the DNE, to support its personnel adequately in the field, the DNE itself needs to be assisted with the organization, strategic planning, and financing (for equipment and operations).

2. **Utilize USAID's BRP Project**

The larger international projects such as Fouta Djallon Highlands Project, are positive attempts at countering an apparent degradation of the environment in Moyenne Guinée. Whether or not such projects are successful in creating sustainable development within watersheds remains to be seen. Nevertheless, the lessons learned from these projects will need to be communicated so that the present and future generations see and hopefully understand activities. Local site-specific projects (such as the watershed projects—BRP—managed by a USAID contractor) are planned in the hopes of ensuring some longevity and adaptation of the knowledge and experience acquired during project life.

These local projects could be included either within an overall regional and national communication and coordination strategy, or be turned over to local NGOs. Indeed, administrative and institutional strengthening of these local organizations may, in the long run, be continued at these and other potential sites.

There is some question as to the institutionalization of lessons learned, since the government staff, on temporary loan to the project, will return to their original posts at project completion. To what extent these agents will be able to apply their new knowledge within the old context remains to be seen.

More systematic invitations to potential partners or future local contractors (or local hires) should be attempted. The idea is to share the experience of the USAID project in the development process. In so doing, USAID contributes to training and EE&C efforts.

3. **Move Towards a General Methodological Approach to EE&C**

■ *A General Perspective on Local EE&C Strategies*—Each watershed represents in some ways a microcosm of Guinean society, including representatives of the Guinean administration (technicians and engineers). In the same way, such a microcosm can be compared to the new concept of *école intégrée* (integrated schools - a policy being implemented by the MEPU/FP with the help of the IPN), opening up the school to its immediate environment, its neighborhood, and its watershed. Because of the complexity of environmental issues, it will be important to deal with ministries that are motivated with regards to environmental questions and education, such as the Ministry of Pre-university Education and Professional Training (MEPU/FP).

Ideally, to implement a coherent EE&C strategy, several EE&C components must be taken into account. These components can be represented as capacities found within the country:

- Formal environmental education (for secondary schools, but mostly for primary schools);
- Training for technicians (foresters, agronomists, health technicians and other government agents);
- Training for local group leaders, and informal education, through village-level facilitation and technology transfer (animation and extension programs);
- Information dissemination and awareness-raising (media support).

If such capacities are identified but need reinforcement or requalifications, then technical assistance will be necessary.

Environmental education is provided through books as well as direct actions. These actions can be individual demonstrations, or collective projects serving as a concrete example of environmental conservation or protection.

New ideas and behavior need to be reinforced with youth and through regular dialogue with technicians. For such reinforcement, certain elements must be in place, or potentially in place:

- Links with representatives of the state (exterior elements) such as teachers, agricultural technicians, etc.;
- Technological links with the exterior;
- Links with CRDs or equivalent representative bodies;
- Links with local populations (adult men, adult women, children in school, children out of school, unschooled children).

This approach helps to ensure sustainability of results (acquisition or development of new ideas and behavior by the local population within a given environment) obtained within a project.

■ *Sensitivity to medium and message as tools*—Given the historical context of Guinea, any communication effort and strategy must be sensitive to how the message, theme, and medium appears to the target audience.

Message development for priority themes geared towards radio programming ideally should be handled by multidisciplinary teams, including a sociologist or anthropologist, an environmentalist, and a communication specialist.

4. **Re-evaluate USAID/Conakry's Position on EE&C**

By choosing to intervene in pilot watersheds, USAID may potentially deal with many environmental concepts and much know-how. To ensure longevity of the technology transfer and knowledge acquired, it also must look at another aspect more closely. After finally being allowed to hire a "media specialist", it may now need to search for reliable specialists in project development and management, and monitoring and evaluation.

At the NRM watershed level, management is assured by the NRM core team and by each of the watershed directors. Directors of watershed programs have the opportunity to conduct development strategies with an ecological or sustainable perspective. For these directors, establishing an EE&C strategy would be a logical extension of their job. Also, within certain BRPs there seems to be some sensitivity to communication strategies, including field demonstrations of new conservation practices, for example.

In terms of developing an EE&C strategy, the role of the media specialist within the NRM Project can be crucial for the sustainability of efforts undertaken to date in the three watersheds: for gathering support (locally, regionally, and nationally) for the NRM activities and efforts; ensuring capitalization of experience; and facilitating the dissemination of this experience to children (EE) and other adults or village groups).

5. **Assess NGO Capabilities**

NGOs and other organizations as implementors of EE&C—The DNE apparently interacts, or at least corresponds regularly, with several NGO's (four of the 18 on its official NGO list). The DNE also has frequently collaborated on training programs intended for NGOs (such as with UNICEF, USAID, and other development organizations). According to the Directeur National Adjoint, one priority for the DNE at the present time is to organize those NGOs which have expressed interest in working on environmentally-related projects, and which have a proven track record, and help them to come into contact with national and international projects and funding sources.

To assess NGO's capability to work on EE&C projects, it will be important for USAID project officers to determine:

- Their capacities, education, and training in: general communication skills; specific language skills; bookkeeping, accounting and financial management; and general management and planning skills.
- Their experience:
 - * whether they have worked with or in schools;
 - * lessons learned from initial and/or ongoing experience and contracts; capitalization of know-how;
 - * bookkeeping, accounting and financial management;
 - * short- and long-term planning;
 - * organization and internal operations;
 - * relationship with clients, partners, and suppliers.

- The NGO's Membership/Subscription
- The perception by local population of the NGO.

Criteria for choosing NGOs (and other organizations)—To have NGOs participate in EE&C activities, USAID must ensure that NGOs:

- Be able to develop booklets and other mediated materials on local sociological and ecological issues;
- Be able to establish links with schools and school teachers;
- Be able to do qualitative research in support of communication activities;
- Encourage participatory methodologies where possible, encouraging participation, etc.). This may be reflected by their: ethics, clear mandate and vision for the future, and motivation.

B. Development of EE&C Strategies for Local Projects

1. Conservation of Rural and Forest Resources

General Objectives for Local NRM/USAID Projects

"Local projects" may include watershed-level projects such as the NRM Project in the Fouta Djallon Highlands (Moyenne Guinée). Here, general objectives for EE&C technical assistance were understood as being: reduction of the permanent staff's workload; more effective collaboration between different sectors; development of a long-term approach (and post-project viability); and support for locally based environmental (natural resource) management.

USAID/Conakry's first request, through the NRM Project team, was for support to the newly hired "media specialist". This support should aim to reduce the workload of other NRM-Guinea team members.

For the media specialist to be most efficient, his work should be geared toward partnerships with local NGOs or local representatives of national NGOs, as well as with local representatives of national agencies and ministries. Priority should be given to: representatives or local actors who have worked on similar programs; and representatives or local people who can contribute to priority theme(s) the media specialist must deal with (such as soil erosion, brush fires, adapted agricultural techniques and appropriate plants, etc). Such persons could be forestry agents, Radio Rurale animateurs, local administrators, etc.

A NRM project-centered strategy could include the following activities:

- Working with the media-specialist position;

- Making links with other experiences and projects in the region (for which the present mission has provided initial elements);
- Establishing priorities and objectives to be reached within the NRM Project timeframe (and beyond);
- Ensuring that these objectives correspond to those of other EE&C efforts and projects in the same region;
- Searching for partners to work with, especially within the NGO community.

The following recommendations focus on those persons found in the field, specifically those working within the three NRM watershed sites in the Fouta Djallon Highlands. The three target populations for the interventions have been categorized in the following way: NRM team members (core team and watershed teams); NGOs; and local populations.

As the recommendations are geared towards EE&C activities and capacity-building, it is useful to concentrate information and coordination of activities around the most logical role, that of the media specialist. It is for this reason that the first specific objective addresses this same person.

First Specific Objective: Training and Support for the Future Guinea/NRM Project Team Member (Media Specialist)

In his role, the Media Specialist will be required to know or learn how to access resources most effectively; how to develop EE&C programs most effectively; and how to develop an EE&C strategy for his three watersheds.

The particular nature of an environmental approach is that of working with the variety of natural resource specialists and users to make one given site, no matter its size, sustainable. This means working with agronomists, agricultural technicians and farmers; with soil scientists; with hydrologists, rural development agents, and local populations; with sociologists, literacy volunteers, and local adults of all ages; and with regional and local administrators, technicians, and locally elected representatives (such as with the newly created CRDs).

If the Media Specialist does not create, from the beginning, allies and partnerships for the different activities he sets up, he may soon find himself overwhelmed by the mass of work he has created. This may mean: working with the head animatrice to find or develop new manuals or support materials for the different projects he may have to undertake; and/or working with representatives of the Radio Rurale to discuss opportunities and program strategies for the coming year.

Following interviews with USAID/NRM Project staff in Labé, several specific objectives were identified which could be met with EE&C technical assistance. These objectives will be translated into project components.

This first objective—training and support for the future Guinea/NRM Media Specialist—can be qualified as *general communication training*, but also can be broken down into subobjectives.

■ *Help to develop themes and messages according to target audiences.*—Themes already identified are:

- Brush fires and their rational management
- Rational use of water sources
- Non-wood uses of forests (such as for medicinal plants)
- Soil erosion, methods (rock bunds)
- Land and tree tenure
- Rotation farming and managing fallow periods
- Live hedges
- Improved woodstoves
- Reforestation and tree plantation.

All these themes will need to be worked on, both as potentially indigenous concepts and know-how, and as concepts integrated within an ecological framework.

Once the themes have been determined, the message must be developed, and the means of dissemination must be chosen. Along with these first steps, a procedure must be respected, such as: assessment, planning, pretest, and implementation. For this procedure, assistance can be proposed.

■ *Mass communication and printed media*—Help to develop, choose, and test different means of mass communication and printed media (posters, manuals, brochures, calendars, slides, audio and video tapes) and their dissemination; that is, help to develop the means of disseminating a given theme and message. Again, the same procedure can be used (assessment, planning, pretest, implementation).

■ *Research on gender differentiation*—Help to develop the appropriate capacities for testing gender differentiation and impact.

■ *Help organize EE programs and strategies for schools within the watersheds (BRP)*—A specific request was made by the NRM watershed animatrice for EE material dealing with health and nutrition.

■ *Explore new and/or traditional means of communication (theater, griots, coranic schools, farmer field days, market day stands, etc.)*

■ *Learn how to work with a programming team for radio broadcasting.*

■ *Other recommendations for Media Specialist*—Links should be made with the various government agencies working on similar programs, such as the DNFC, the SNA, etc.

Second Specific Objective: Training and support for other Guinea/NRM watershed technicians (loaned by the government or in government service) as well as members of local NGO partners.

EE&C cannot be the only component of a training program addressing these personnel and partners. Also necessary are other complementary capacities and know-how, such as personnel management, communication in general, project planning and accounting. It should be remembered that such interventions, whether strategically planned or not, will eventually reach and sensitize local administrators (DPDRE, IRE, DPE).

Some questions which appeared through the specific request of a NRM watershed director, involved how to integrate the functions of an environmental facilitator (*animateur*) or educator into the role of the extension agent or agricultural, forestry technician and NGO member; how to raise awareness of government field technicians and of NGO members regarding the impact of their attitudes and behavior on the populations they are serving; and determining the best ways to address a theme with the local populations.

In addition, other subobjectives may include:

- *Access to EE material*—A lack of pedagogical materials can limit extension, awareness-raising and information campaigns. Ideally, at least a minimal choice of support materials should be available at each watershed office; still better, the materials available should be adapted or developed for the specific populations of the watershed. This need was also expressed by a NRM watershed director and by the NRM core team animatrice who specified that some intervention was necessary.

The development of support materials should be monitored and a procedure followed that includes pretesting and evaluation. An initial and limited assessment was conducted recently as one of the NEAP consultancies (see Princet, Annex C).

- *Production of written technical information sheets*—This second component involves the development or support of a local project's capacity to produce on-paper pedagogical material (Endman's *fiches techniques* - Annex C). This component corresponds to specific requests from the Guinea/USAID NRM Project's agroforester and one of its watershed directors.

- *Aid in participatory environmental education needs assessment at the local level*—Such an intervention could involve NGOs directly (such as the CENAFOD), as well as counseling from a training specialist. This was a request from a NRM watershed director.

- *Assistance in strategic planning*—This intervention was developed in response to the request from a NRM watershed director, and reflects the point that strategic planning may be normally the task of a NRM team.

Third Specific Objective: EE&C training for local populations and their spokespersons

This last specific objective linked to the watershed context may well be the most crucial and delicate of all and yet, the least can be said about this topic. Little information is available on how the local populations perceive their environment, and those persons who are their correspondents or intermediaries are unable to act as acceptable information relays. Perhaps this is an indicator of a need for better and more generalized use of participatory communication and planning methods (such as PRA).

Indeed, an EE&C strategy will vary according to the peculiarities of the environmental and socioeconomic situation, such as: the role of the resource users; where the traditional knowledge is kept or to be found; and the types of ethnic groups and their interactions.

EE&C means not only discovering or learning a technique, but also being able to know whether or not it is the right technology or technique for a given environment; know how to adapt the technology or technique; and explain to the "expert" why a given environment cannot support such a technology or technique.

2. **BRP EE&C Strategies**

NRM Projects and Integration of EE&C Components

Because of budget limitations and constraints, whether at the GOG level or the level of the USAID-Guinea Mission, both parties find themselves needing to examine their ways of functioning, to reduce redundancy within operations, and to share their resources as much as possible—be they human, material, or financial. This may be a difficult task at first, but the idea is to acquire strong reference materials and information; individual persons with stronger multifunctional skills (*polyvalence*); and a sensitized population, particularly the partners, clients, and suppliers of the individual persons. This may, for example, translate into:

- Pooling funds from the budgets of each Mission Office to support local capacity-building for an important development tool, such as *Radio Rurale*.
- Establishing collaboration on specific projects among different governmental organizations (curriculum development, for example); and
- Ideally, nurturing national partners to support each of these components.

Radio Rurale

The rural radio component may prove itself to be an important partner in EE&C, given the positive image it has among rural populations. The choice of using and therefore supporting rural radio, however, is not totally coherent with the USAID NRM Project objectives. The NRM Project Director insists on remaining, as much as possible, within the project's three watershed boundaries. Choosing to use rural radio is implicitly a way of engaging in extension beyond these boundaries. Such indirect influence on other

populations can only be encouraged as it allows for the BRPs to play their predestined roles as examples of preferred environmental management in the making.

A way out of this potential quandary would be to invite other BRP projects (GTZ, GERP, EC, etc.) to contribute to a common budget for programming specific messages that they would all like to have broadcast.

An EE&C strategy using the Radio Rurale could include: regular information programs (geared towards specific audiences); training support programs; and awareness-raising programs.

Such strategies depend on the objectives and the types of target audiences. Programming should be developed either for a national, regional, or, if possible, local (prefectoral) audience. For example, if the theme is technology, people will need to know where they can view such technologies being used. Listeners also will need to understand that the technology is not applicable in all situations. The Director of the Radio Rurale is apparently sensitive to such issues.

Radio programming costs, so a marketing and accounting structure would likely include some time for commercial broadcasting, under the control of the target audience. This must be studied with regards to the real budgetary constraints at the national level.

EE&C Plan of Action within the NRM Project

USAID should be looking for operational partners - reinforcing as much as possible the partners' ability to intervene in specific areas of expertise.

One possible local BRP strategy would be to begin with one of the four EE&C components—EE in primary schools (most present in rural Guinea); training for technicians (foresters, agronomists, health technicians, and other government agents); training for local group leaders; and media support. For example, EE in local primary schools might have an objective of creating environmental education material with the IPN team or the Radio rurale team. Parallel to this, or in another phase, the BRP director could invite willing and able actors to test their skills with project elements and resource user groups so that they might collaborate.

Means

Each of the four previously mentioned EE&C components can be supported indirectly by contributions from other projects. For example, PRIDE could help to raise the quality of financial and human resource management within the rural radio system. The local primary schools in each watershed could test new didactic materials (on health, environmental, and population issues) developed by the IPN under contract with HRDO (USAID/Conakry).

Other external types of collaborative efforts on EE&C activities could thus be translated into the following schematic examples:

- One BRP, with the help of local Peace Corps Volunteers, may be testing or developing EE material for addressing the issue of health and environment within a primary school setting. The PCVs could be helped by the local DPE education agent (at the prefectural level).
- Both the IPN in Conakry, and its antennae at the regional (IRE) and the prefectural (DPE) levels, the future CRAFEE at Pita, can provide support materials for EE in schools.
- The ENATEF near Mamou conducts training for forest technicians, with a small course on EE while providing practical activities linked to EE questions (the CERE also may be of some support).
- The CENAFOD, a local training NGO, is well experienced in training facilitators (animateurs), especially in participatory methods.
- Guinea's rural radio system can potentially provide sound media support and participative programming methodologies if it is given the means to do so.

3. **Recommendations for Developing an Internal USAID Mechanism for Dealing with EE&C Issues**

Specific Recommendations

Find EE&C coherence in multidonor projects—Ensure that projects at the same or similar sites, but which depend on different ministries and different donors, work together, or at least share experiences, resources, and expertise.

It seems that many different efforts in and around EE&C have been attempted, are underway, or are expected. This first GreenCOM mission has sought to bring out, as much as possible, the links and interactions on similar content or support areas to suggest interactions that should be made routinely. One major challenge has been motivating people, institutions, and organizations to share information and to reflect together on global strategy to mobilize local and national populations on a given theme - whether it be land use (erosion control, management of brush fires, etc), or economic development in rural areas (appropriate technologies, training opportunities, development of markets, etc.).

One institution or organization needs to be identified that would have the mandate to coordinate EE&C efforts. Such an institution/organization would have to be amenable to receiving procedural training on facilitation methods and able to follow a systemic agenda and a multiyear action plan.

A team or committee within USAID/Conakry might be organized internally to ensure that environmental issues and their corresponding EE&C strategies are better monitored. The

general goal is to accustom all players to following a cross-sectoral "environmental approach".

Possible Strategies for Regional and National Levels

It is important to envision national and institutional possibilities for collaboration with other organizations, ministries, or ministerial divisions. Several activities seem to be linked to a common focal program on environmental education (EE&C).

National EE&C Strategies

Approach—To recommend strategies whether local or national, it is important to know:

- Where "environmental" projects are taking place;
- The level of education of the given populations;
- The experience and sensitivity levels of the local populations;
- Environmental issues;
- Government or external intervention in general; and
- The experience and sensitivity levels of the government agents and/or NGOs.

National Level Projects—USAID/Conakry is apparently moving forward in supporting the NEAP's seminars on institutional and legislative capacity. Such support could be coupled with specific actions such as reinforcing the capacities of certain bodies, such as the CNE or the DNE given their respective objectives, and around specific projects USAID/Conakry is already supporting or may decide to finance.

Information and Coordination Projects involving EE&C

■ *Information Bulletin*—There appears to be an effort from one local NGO (Guinée Ecologie) to create and publish a regular inter-NGO and project newsletter, a type of information bulletin oriented towards environmental issues. Such an effort is certainly laudable, and a good example of the role which NGOs can begin to play within the national decentralization process. Such an initiative should inspire other ideas, such as linking the bulletin to a clearinghouse for documentation, for example.

The objectives of such a printed media should be seriously examined, however, if long-term viability is to be assured. It is important to determine how these examples of motivation (opportunities) could be used to support local, regional, and national activities.

Collaborating with the Radio Rurale, some future information bulletin could act as a clearinghouse for news programs (and "*grilles de programmation*") as well as for information sources for review articles, critiques, pedagogical material (EE material), etc. The bulletin, principally supported by NGOs and their projects, could also include headings directed towards different government services (such as the DNFC).

■ *Clearinghouse*—Development of some sort of network or clearinghouse would be equally useful. One activity would be to plan a meeting on this topic with USAID, World Bank, GTZ, and Guinée Ecologie, among others). One prerequisite would be a well-structured and coherent information system. This has been addressed by the PNAE, as well as by such projects as the World Bank's PGRR, and others. Geographically based projects, such as USAID's NRM projects or the World Bank and KFW's PNGRR, have the objective to set up information systems which allow for sharing of information on the environment and natural resources.

Optional Regional and National Strategies around EE&C Projects

■ *Prefectoral zone projects*

- *General objective*—Present NRM Project efforts and experience in EE&C within the perspective of generalizing the project and ensuring its longevity.
- *Specific objective*—Develop, or help to develop, a strategy and organize the extension and generalization of EE&C approaches.
- *Partners and/or clients*: DPDRE's of Kindia, Lélouma and Tougué, DPE, DNFC

After local EE&C components are underway, USAID/Conakry may discover other options to develop knowing that regional and national strategies will build upon the local strategies and experience. With this in mind, local strategies must remain a *subobjective* of the regional or national strategies.

■ *Future Regional Options*

- *EE&C strategy for coastal zone and maritime resource management*—In some ways, fishermen working near Conakry are more advanced as collective entrepreneurs because they have a large market at their disposal. Possible collaboration among locally based projects, support teams or groups, and other organizations could be found with: Kamsar (Compagnie de Bauxite de Guinée), Mangrove project (Dubreka, etc), CRDs, URPAC, DIPA, PADEULAC, La Radio Rurale (Kindia). The major theme to be advanced would be the reduction of pollution levels in the territorial waters off Conakry (protection of fish habitats, mangroves, and islands).
- *EE&C strategy for urban solid waste and water pollution control in Conakry*—The work of organizations such as UNICEF and Africare, in conjunction with urban authorities, urban planning efforts, and training (CENAFOD) and educational (IPN) institutes, are experiences that should be widely disseminated. Here again, pilot projects have been implemented, and people and neighborhood associations have been motivated. The question now could be what EE&C strategy to develop and with whom. A feasibility study might well be warranted.

■ *Potential Markets for EE&C Specialist Skills*—Whether the competencies are transferred or acquired by direct hires or subcontracts (*animatrices*, NGOs), or by personnel secondment (Media Specialist, agroforesters) from the GOG, EE&C competencies must be promoted. One on-going project of this nature is the training of government agents on environmental behavior. The apparent objective in this case is to train DPDRE environmental agents.

Once local competencies have been well-established future clients and partners should be made aware of what NRM personnel and suppliers can offer. Marketable competencies will include:

- Technical content knowledge (e.g., environmental concepts);
- Coordination and facilitation tools (e.g., PRA or "Méthode MARP");
- Pedagogical approaches (training of trainers and facilitators);
- Didactic supports (slides, EE, A/V, posters, etc).

C. Action Plan

Regularly scheduled phases will reinforce previous lessons or consolidate link-ups made with different organizations. The following Action Plan may correspond in some ways to a preparatory first phase for the CRAFEE project. Indeed, other contributions could be negotiated with potential partners who also are active in EE&C (e.g., UNICEF).

Technical Assistance Package

If technical assistance is required by the RDO and the NRM Project, short-term interventions by an external consultant-trainer may well suffice. The technical assistance should and can be kept to a minimum through a gradual system of partnerships with local administrations, NGOs, and projects. During the three intervention periods, it is recommended that there be present at least part of the time.

On-going General Objectives

Throughout all Three Phases

- *Help to bring about a coherent human resource development plan* taking into account local budgetary capacities. This involves changing attitudes about aid programs. Local personnel must justify needs for seed-monies, with strong motivation and clear integrative and self-financing (business, tourism) capacities.
- *Help to identify capacities, and help to choose competent and available personnel*—motivated change agents—for key positions within the project, whether at the steering committee, managerial, or local execution level; link this with the criteria for choosing competent NGO candidates for future subcontracts and/or partnerships.
- *Develop training capacities* and a local, regional, and national network for continuing education.
- *Create support groups from both the NGO and economic communities* to work on one or several of the other stated objectives.
- *Pursue and achieve coherence in the messages emitted from different sources* (different projects, organizations, ministries, radios, etc.)
- *Structure the information flow within each site-specific project*—It is at the level of the Media Specialist, overseeing the EE&C activities in three watersheds, that such networking will best develop. Roles or functions can be defined as the various activities and communication events proceed. As the USAID/NRM Project progresses, recommendations may then be proposed to the various Ministries and Directions for generalizing workable linkages in the field. For example, similar approaches could be proposed to urban environmental projects or to coastal zone management projects.

- *Develop local managerial capacities to facilitate the objectives.*
- *Work on capacity-building (with MEPU/FP, CNE, DNE, CENAFOD).*
- *Examine potential opportunities for collaboration with multilateral donors/agencies and other bilateral donors (EC, UNICEF, FAO, World Bank, French, Canadian). Conduct marketing towards potential actors and contributors from the public sector and the private sector (e.g., CRAFT, PACIPE, PASE, Ministère du Plan, professional groups, Chamber of Commerce).*

Later Phase Options

One option may be to visit other sites and develop interactions with other donors. Such an approach would entail slightly greater organizational capacities and several preparatory visits within a long-term monitoring and evaluation of the training and technical assistance intervention.

Logistics

The training workshop could be held in Labé, Kindia, or some other location where interesting EE&C efforts can serve as examples. If USAID/Conakry decides to proceed with this program, RDO should send out a call for candidacy for collaborating NGOs in conjunction with the SCIO and the DNE.

Schedule

The phases are scheduled for the following times:

Phase I - June/July 1994

Phase II - Nov/Dec 1994

Phase III - Apr/May 1995

Technical Assistance: Phase I for Environmental Education

General Objective

Prepare and provide know-how to educators and field workers in using schools as an information vector, and in using field experiences and activities (operated by parents and extension workers) as teaching vectors. Show them how to use their own presence in the field (watersheds) as an opportunity for collaborating and developing effective EE&C activities.

Specific Objectives and Activities

- *Contact and work with person(s) appointed from USAID/Conakry and DNE.* Clarify roles and functions identified in different organizations and ministries. Interview NGOs, determine their profiles with the help of the DNE.
- *Facilitate the final phase of the NEAP process.* Help clarify goals and objectives and help the actors reach a common consensus and develop a prioritized plan of action. Certain criteria are proposed within the present Action Plan as prerequisites for working with NGOs, private entrepreneurs, and government services in general. In the next NEAP seminar on the institutional and legislative context, case studies, to be used as illustrations, could be prepared with the help of experienced local development professionals.
- *Arrange a coordination meeting with the various USAID/Conakry offices to evaluate support activities in EE&C.* Analyze the opportunities and feasibility of initiating and developing EE&C activities and strategies in each of the three NRM watersheds.
- *Reassess the training needs of Guinea-NRM's future Media Specialist, including participative methods; choice of media; facilitation of information flow; budget development; marketing of communication; and concepts (environment, systemic approaches, interdisciplinary).* Arrange a strategy meeting with the NRM project team (agroforester, animatrice, economic development specialist, etc.) to determine priority areas, priority partners, and an assessment of the different actors involved. Reassess specific needs expressed by the rest of the core NRM team.
- *Contact and interview potential candidates (including recruitment) for co-training with the Media Specialist; for example:*
 - USAID/Guinea IEC (GDO) assistant/specialist
 - USAID/Guinea training (TO) assistant/specialist
 - USAID/Guinea education (HRDO) assistant/specialist
 - DNE Environmental Education person
 - Radio Rurale animateur specialized in environmental issues
 - IPN's media person
 - DNFC's extension and training person (within the Division de Forestrerie Rurale)

Once individuals have been identified and/or recommended by their institutions, these individuals will be followed by the appointed USAID/Guinea officer or assistant. In this way, such a series of interventions will help to build up competencies in dealing with educational and communication media at the NRM/USAID watersheds, within the DNE, and within the IPN. Motivation for this will be the specific Action Plans, with the help of local professionals and peers from the different contributing or collaborating organizations. Contingency should be planned for the case where one of the trainees must depart or drop the program—perhaps some sort of volunteer understudy.

- *Assess Radio Rurale needs,* both with regards to supporting the USAID NRM Project and with regards to support of a long-term EE&C strategy (covering all

BRPs—the Fouta Djallon Highlands, or Moyenne Guinée; other national regions; and the whole country).

- *Prepare training workshop, materials, and sites.*
- *Facilitate training workshop.*
- *Contact other potential partners (such as IPN, UNICEF, Peace Corps, PRIDE)—Arrange a coordination meeting with other donors on the subject of funding possibilities for the various EE&C activities USAID/Guinea wishes to support. Create an inter-project or an inter-ministerial work group on M&E.*
- *Assess the coherence of information sources and published materials (with IPN, DNE, Guinée Ecologie, USAID/HRDO).*
- *Develop other predetermined and potential themes (corresponding to objectives of next phases).*
- *Prepare and evaluate next ongoing Action Plan.*

Technical Assistance: Phase II for Training of Local Facilitators for Village Groups and for Training and Retraining of Engineers, Technicians, and Other Professional Government Agents

General Objectives

To train local group leaders to be representative spokespersons and collaborators with local government agents and project directors. To sensitize government agents (foresters, agronomists, health workers, etc.) in the communication role they play in transferring information back and forth from the field regarding environmental issues; help to bring about attitude and behavior change within this target population.

Specific Objectives

- *Work with person(s) appointed from USAID/Conakry and from DNE.*
- *Evaluate monitoring and progress during interim (between-phase) period.*
- *Contact and interview potential candidates (including recruitment) for co-training with the Media Specialist:*
 - USAID/Guinea IEC (GDO) assistant/specialist
 - USAID/Guinea training (TO) assistant/specialist
 - USAID/Guinea education (HRDO) assistant/specialist
 - DNE Environmental Education person
 - Radio Rurale animateur specialized in environmental questions
 - IPN's media person
 - DNFC's extension and training person (within the Division de Forestrerie Rurale).

These candidates will include engineers, technicians, and extension agents with field practice. Competencies include ability to gather evaluations from local population groups on the subject of communication and exchange of environmental knowledge.

- *Prepare training workshop, materials and sites.*
- *Facilitate training workshop.*
- *Work on coherence of information sources and published materials (with IPN, DNE, Guinée Ecologie, USAID/HRDO).*
- *Work on capacity-building (with MEPU/FP, CNE, DNE, CENAFOD).*
- *Conduct marketing towards potential actors and contributors from the public sector and the private sector (CRAFEE, PACIPE, PASE, Ministère du Plan, professional groups, Chamber of Commerce).*

- *Develop other predetermined and potential themes* (corresponding to objectives of next phases).
- *Prepare and evaluate next ongoing Action Plan.*

Technical Assistance: Phase III for Radio Programming and Broadcasting

General Objective

To encourage those persons working within different ministries and services to become useful collaborators for the rural radio amateurs to help conceive radio programs and/or to be able to use the programming for the maximum benefit of the end-users (local populations) in the area of environmental management practices and monitoring.

Specific Objectives

- *Work with person(s) appointed from USAID/Guinea (Conakry) and from DNE.*
- *Evaluate monitoring and progress during interim (between phase) period.*
- *Conduct in-depth assessment of radio programs and strategies where they have taken place (with visits, interviews with beneficiaries, administrators, and financing clients).*
- *Prepare of training workshop, materials, and sites.*
- *Facilitate training workshop.*
- *Work on coherence of information sources and published materials (with IPN, DNE, Guinée Ecologie, USAID/HRDO).*
- *Work on capacity-building (with MEPU/FP, CNE, DNE, CENAFOD).*
- *Conduct marketing towards potential actors and contributors from the public sector and the private sector (CRAFEE, PACIPE, PASE, Ministère du Plan, professional groups, Chamber of Commerce).*
- *Develop other predetermined and potential themes (corresponding to objectives of next phases).*
- *Establish case studies and procedures for M&E.*
- *Prepare and evaluate next ongoing Action Plan.*

ANNEX A

INVENTORY OF RELEVANT ORGANIZATIONS AND THEIR EE&C ACTIVITIES

In this broad inventory, some organizations were examined in depth, others were briefly considered, and the rest were merely taken into account. First, a complete list of the names of these organizations is presented. More detailed descriptions are presented in the subsequent lists:

Annex A.1: Detailed descriptions of governmental (GOG) and international organizations (or projects) involved in EE&C activities.

Annex A.2: Detailed descriptions of non-governmental organizations (NGOs) involved in EE&C activities.

Annex A.3: Brief descriptions of governmental (GOG) and international organizations (or projects) involved in EE&C activities.

Annex A.4: Brief descriptions of non-governmental organizations (NGOs) involved in EE&C activities.

List of Organizations Contacted or Identified

ADEG (Association Guinéenne pour l'Environnement et le développement) [A.4]

ADR (Association pour le Développement Rural) [A.4]

AGBEF (Association Guinéenne pour le Bien-Etre Familial) [A.4]

AGEE (Association Guinéenne pour l'Education et l'Environnement)

AGPR (Association Guinéenne pour la Promotion Rurale)

AGPTCL (Association Guinéenne pour la Promotion du Tourisme et des Centres de Loisir)

AGUIFAC (Association Guinéenne des Femmes pour l'Assainissement de Conakry)

AGUIPER (Association Guinéenne pour la Promotion des Energies Nouvelles et Renouvelables)

AJUPE (Association des Jeunes Universitaires pour la Protection de l'Environnement)

ANSG (Association Nationale des Scouts de Guinée)

ASSOANE (Association des Amis de la Nature et de l'Environnement)

AVADEG (Association Guinéenne pour l'Assistance au Développement en Guinée)

CECI

CEDUST (Centre de Documentation Universitaire Scientifique et Technique)

CENAFOD (Centre Africain de Formation pour le Développement) [A.2]

CERE (Centre d'Etudes et de Recherches sur l'Environnement)

CNE (Conseil National de l'Environnement) [A.3]

COGUIREPAF (Cooperative Guinéenne pour la Restauration du Patrimoine Forestier)

CRAFEE (Centre de Recherche-Action-Formation en Education à l'Environnement) [A.3]

DNE (Direction Nationale de l'Environnement) [A.1]

DNFC (Direction Nationale de Forêts et Chasse) [A.1]

DNFPR (Direction Nationale de la Formation et de la Promotion Rurale) [A.3]

DNSE (Direction Nationale des Sources d'Energies) [A.3]

DPDRE (Directions préfectorales du Développement Rural et de l'Environnement) [A.3]

EAST (Eaux - Agriculture et Sante en milieu Tropical)

EEF (Eaux - Environnement et Forets)

ENATEF (Ecole Nationale des Agents Techniques des Eaux et Forêts) [A.3]

GENAGRO (Gestion Environnement-Agronomie)

Guinée Ecologie [A.2]

IPN (Institut Pedagogique National) [A.1]

IVGE (L'Institut Supérieure Agronomique et Vétérinaire Valéry Giscard D'Estaing) [A.3]

MEPU/FP (Ministère de l'Enseignement Pré-Universitaire et de la Formation Professionnelle)

OGES (Organisation Guineenne pour l'Environnement et la Sante)

PACIPE (Programme d'Appui à la Communication et à l'Information sur la Protection de l'Environnement) [A.3]

Peace Corps

PNVA (Projet National de Vulgarisation Agricole) [A.3]

Rural Radio [A.1]

VGE (Volontaires Guinéens pour l'Environnement) [A.4]

ANNEX A.1

Detailed Descriptions of Governmental (GOG) and International Organizations (or Projects) Involved in EE&C Activities

■ DNE: Direction Nationale de l'Environnement

Context: Under the Natural Resources and Environment Ministry

Contact persons:

- Mr. Claude Gerard Coker, Directeur National Adjoint
- Mr. Sekou Sylla, Responsable du PACIPE

Mandate: Execution of the government's environmental policies, particularly in the area of natural resource management. The DNE currently 1) has a coordinating role and 2) is involved in developing national norms for industrial and agricultural pollution, respectively.

The DNE is also responsible for a subregional awareness-raising project, PACIPE, financed by the EC. Start-up date is September 1994. This project's objective is to define and implement an Action Plan for communication and information in the environmental area in collaboration with media partners and development projects.

Organization: The DNE is composed of four divisions dealing with:

- Studies and synthesis (general studies, project M&E, information analysis);
- Pollution and nuisance abatement and control (for high-risk industries, marine and coastal pollution, etc);
- Nature and resource protection;
- Environmental law, information, and education.

Comments: The DNE seems to be on target, having prepared, with the help of its deputy director, an annual workplan. The information programs it wishes to propose seem coherent with regards to external and seasonal needs.

The DNE has identified 18 environmental NGOs, of which only a few are confirmed as operational.

■ **DNFC: Direction Nationale de Forêts et Chasse**

Context: Ministry of Agriculture and Animal Resources (MARA) *Structure:* This Direction's activities are distributed among four divisions: protection, management, rural forestry (including woodfuel management), and economy and legislation. The Direction also is responsible for a forestry school (Le Centre forestier de Sérédou).

Services linked directly to the Director's office:

- Jardin botanique de Camayenne
- Centre forestier de Sérédou
- Service régional d'aménagement et de restauration du Fouta Djallon
- Offices régionaux d'aménagement forestier du Niger et Kankouré
- Projets forestiers dont PROGERFOR

Cell linked directly to the Director's Office: Cellule de planification et coordination des programmes.

Responsibilities of Division "Faune, protection du patrimoine forestier et lutte contre feux":

- Protection du patrimoine forestier et lutte contre les feux de brousse
- Chasse et Parcs nationaux
- Espaces verts et jardins biologiques

Responsibilities of Division "Foresterie Rurale":

- Animation et vulgarisation forestière
- Bois-énergie, bois de service et produits accessoires
- DRS, CES et plantations villageoises

The DNFC directorate participates in the radio and TV program entitled "Protégeons Notre Environnement".

■ Rural Radio

Contact Person: General Director, Mr. Cheik Sylla

Type/status: "Service rattaché" au Ministère de la Communication. This special status gives the Radio Rurale more autonomy, and as "directeur général", Mr. Sylla has a little more hierarchical power than the director of Radio-Télévision Guinéenne (RTG).

Collaborating Ministries: MARA, Min. des Ressources Naturelles et de l'Environnement.

History: The Swiss have financed rural radio from its start; however, Swiss representation left Guinea in 1992. Since 1984, several Round Tables have been held, financed by USAID. Cheikh Sylla also has travelled around Africa as a recognized expert in the field.

Each of Radio Rurale's four regional stations is composed of eight persons:

- 5 animateurs (one of which is the station director, and one in each team responsible for the "environment" theme)
- 2 technicians
- 1 chauffeur

Target Populations: Populations and language groups within each of the four natural regions of Guinea.

Main purpose: To be the radio of the local rural populations, and to work on development themes. Mr. Sylla is much influenced by community radios that function in Europe.

Activities/Resources/Experience: Some of the themes rural radio has addressed: environment (bush fires) and economic development (enterprise development), including tourism, health, higher small-plot agricultural yields.

Opportunities for follow-up EE&C: Recommended first step: conduct a detailed evaluation of specific information programs linked to environmental programs.

As Radio Rurale's strong point is participative programming, it would be interesting to use the expertise there to evaluate environmental programs developed by Guinea television (RTG).

■ **IPN: Institut Pédagogique National**

Organization: Cellule Opérationnelle d'Education à l'Environnement

Contact Person: Mr. Lamine Barry, Coordonnateur de la Cellule

Context: Within the Institut Pédagogique National, a public institution attached to the Ministère de l'Education Pré-Universitaire et de la Formation Professionnelle.

Type/Status/Organization: IPN is structured into three large divisions:

- Curriculum and Training (Curricula et formation)
- Pedagogical support and distance learning (Appui pédagogique et enseignement à distance)
- Manuals et publications

The Cellule Opérationnelle d'Education à l'Environnement appears as one of three sections within the Curriculum and training division. The other two sections are population ("Education en matière de population") and technical education ("Education manuelle et technologique").

Size: The core team is composed of Mr. Lamine Barry, Coordonnateur de la Cellule Opérationnelle d'Education à l'Environnement; Mr. Moctar Barry; Mr. Malik Bah, responsible for documentation; Mr. Martin Cémaomi; and Mr. Thierno Hamidou Bah, Chargé d'études dans la Section Sciences Naturelles.

Target Population: Primary and secondary schools (children, teachers, and school clubs); most activities are concentrated on primary grades since these reflect the vast majority of the school population. Primary education also has become a priority for the Ministry.

Main Purpose: The three main objectives of the IPN are curriculum development (primary, secondary, and professional); elaboration of pedagogical tools (books, audiovisual, computer software); and pedagogical research. The activities of the Cellule Opérationnelle d'Education à l'Environnement began with initial European Community funding for curriculum development.

Funded Projects Involving the Cellule:

1990-1991—Elaboration and experimentation of an EE program for the Ecole Nationale d'Instituteurs (National primary school teachers training college). Part of a series of pilot projects initiated by UNESCO in different countries. Financing (US \$8,000) and terms of reference provided by UNESCO.

1991-1992—Elaboration of a pedagogical guide for EE, geared towards secondary schools. Requested and financed (US \$5,000) by the BREDA (UNESCO).

1992-1993; 1993-1994—Collaboration ("protocol d'accord") with UNICEF, within the context of Conakry's urban program (PADU, Programme Urbain de Conakry) on the program "Ecole

Propre/Ecole Verte", developed in two phases: four schools the first year, four more schools the second year. There were five experimental areas within this program:

- Awareness-raising within the school curriculum;
- Practical activities (clean-up of school-yards and latrines);
- Creation and maintenance of urban parks green spaces;
- Ecological bulletin;
- Awareness-raising via radio programs.

Primary schools in Conakry involved in the "Ecole Propre/Ecole Verte" project:

- Commune de Dixinn—Bellevue Tito and El Hadj Oumar
- Commune de Ratoma—Kipe II
- Commune de Matam—Matam I, Bonfi Marché, and Bonfi Port
- Commune de Matoto—Gbessia Port
- Commune de Kaloum—Sandervalia

Elaboration of pedagogical guide for a comic strip (*bande dessinée*) and training of teachers within the framework of a rural development program ("Programme eau et assainissement" dans les zones rurales). Some topics include health and hygiene in the school. Experimental schools involved: Maferia (in the Forecariah préfecture) and Kindia.

1993-1994—Elaboration of an Action Plan; collaboration on a training seminar for future counselor-trainers (conseillers formateurs), who were originally agronomists, foresters, teachers, and members of NGOs. Activities within the framework of the PASE program, with 25 pilot rural schools involved.

Other resources:

One person is responsible for all documents produced by the Cellule. Apparently this functions relatively well, although a copy of the recent primary school textbook financed by the EC was not available.

The Cellule has access to a Vidéomobile which belongs to UNICEF and which rotates among eight primary schools.

Opportunities for Follow-up EE&C:

Projects being developed—The IPN Director is heading a committee examining different action-research (Recherche-Action) activities. One objective is to determine whether EE can be a way of integrating the school into its environment, and involving the school children's parents.

A school/neighborhood ("Ecole/Quartier") project is being developed with the NGO Guinée Ecologie as a possible NEAP follow-up activity.

The future CRAFEE institute will have one similar objective within its overall mandate to train future animateurs.

Collaborative opportunities—link-ups could be made between some of the experimental schools involved in the IPN/UNICEF project "Ecole propre Ecole verte", and neighborhood clean-up projects.

ANNEX A.2

Detailed Descriptions of Non-Governmental Organizations (NGOs) Involved in EE&C Activities

■ **CENAFOD: Centre Africain de Formation pour le Développement**

Contact Person: Ben Sekou Sylla, Executive Director

Activities: Pilot training programs in 14 CRDs where counseling and training focuses on:
1) democratization and decentralization; 2) legal codes; 3) land tenure; 4) CRD finances; and
5) project development.

CENAFOD also has worked on a primary school book and teacher's guide (FED Project). CENAFOD will try to develop a functional literacy program geared to environmental issues. The hope is to train local literacy agents.

■ **Guinée Ecologie**

Contact Person: Mamadou Saliou Diallo, Executive Director

Activities/Resources/Experience: Has benefitted mostly from voluntary support from both European and Guinean members. Concretely it has benefitted from the experience of two projects: a European Community-funded project for the management of a protected island that is a reproductive site for certain species of sea turtles; the other is a second attempt at elaborating Guinea's National Environmental Action Plan. This latter project gave the NGO an international status and notoriety. Because of this experience, this NGO is now developing a new mandate (as yet to be approved by its governing board) geared towards two purposes: education and awareness-raising on environmental questions; and development of partnerships and a network of NGOs.

Opportunities for follow-up EE&C: Guinée Ecologie, because of its established political credibility, might be able to play a role in facilitating a national EE&C strategy. Indeed, what is crucial at the present time, is knowing how to get programs approved at the highest levels of government, given that many ministries are at a standstill as the country waits for restructuring of the government.

ANNEX A.3

Brief Descriptions of Governmental (GOG) and International Organizations (or Projects) Involved in EE&C Activities

■ **CNE: Conseil National de l'Environnement**

Created in 1987

Objective: Coordinate and create some coherence among activities at different levels (national, regional, and cross-institutional).

Structure: The permanent secretariat of the CNE is currently managing the Pilot Committee of the NEAP (PNAE).

■ **CRAFEE: Centre de Recherche-Action-Formation en Education à l'Environnement**

This center will be set up by the MEPU/FP as the first teachers' college for environmental education (in Pita). It also will propose training of animateurs in field research and assessment.

This project may be financed by the PASE (Programme d'Ajustement Sectoriel pour l'Education).

■ **DNFPR: Direction Nationale de la Formation et de la Promotion Rurale**

Context: Ministry of Agriculture and Animal Resources (MARA).

Manages a training center (Centre de formation de Tindo).

■ **DNSE: Direction Nationale des Sources d'Energie**

Context: Under the Natural Resources and Environment Ministry.

Mandate: Responsible for the dissemination of improved woodstove programs; is overseeing the "Projet de développement et de promotion des foyers améliorés domestiques" which began in 1992 with the support of the FED.

■ **DPDRE: Directions Préfectorales du Développement Rural et de l'Environnement**

Mandate: Executes, at the prefectoral level, the policies of the M.A.R.A. within the agricultural, rural development (génie rurale), animal husbandry, fisheries, forests, and the environment in general.

■ **ENATEF: Ecole Nationale des Agents Techniques des Eaux et Forêts**

Context: Depends upon the Ministère de l'Enseignement pré-universitaire et de la Formation Professionnelle.

History: Created in 1992, with Swiss aid.

Structure:

- Three-year program, with 25 students for each class (promotion);
- Has one department specialized in extension work (vulgarisation), with one course on EE.

Activities:

- Establishing new programs with local project partners (Mamou préfecture);
- Responsible for managing the local forêt classée (Mamou), which was suffering regular poaching and pillaging by the local population;
- A hands-on program for developing a strategy to manage this forest, reduce population encroachment, and sensitize specific cross-sections of the local population (students, farmers, etc.).

■ **IVGE: L'Institut Supérieure Agronomique et Vétérinaire Valéry Giscard D'Estaing**

Context: Under the Ministère chargé de l'enseignement supérieur.

Address: Located in Faranah.

Mandate: Trains, in five years, future "ingénieurs" for agriculture, animal husbandry, forestry, and rural development ("génie rurale").

■ **PACIPE: Programme d'Appui à la Communication et à l'Information sur la Protection de l'Environnement**

Essential vector and principle support (in terms of material, logistics and financing) of the education and awareness-raising purposes of the NEAP.

■ **PNVA: Projet National de Vulgarisation Agricole**

Context: Ministry of Agriculture and Animal Resources (MARA)

The PNVA is a project under the direct authority of the General Secretariat of the MARA. This project is scheduled to progressively extend itself to the total national territory: it is now covering four regions, 19 préfectures, 127 sous-préfectures (out of 168), and 625 districts (out of 1,002). The extension system applied is the T&V (Training and Visitation) approach. This network is composed of 650 field agents and 41 specialized technicians for whom continuing education is proposed at

regional agricultural research centers as well as within specialized development projects (such as the GERF in Mamou, for the theme "Gestion des terroirs"). This project's monitoring and evaluation (M&E) is based on internal evaluation of its operations. It is expected that the PNVA will pick up M&E activities normally taken care of by the DPDRE.

ANNEX A.4

Brief Descriptions of Non-governmental Organizations (NGOs) Involved in EE&C Activities

■ **ADEG: Association Guineenne pour l'Environnement et le developpement**

Specialized in identifying and assembling traditional tales which can be used within schools for promoting environmental themes. Recognized by the DNE.

■ **ADR: Association pour le Développement Rural**

Mamou préfecture

Address: s/c projet GERF, Mamou.

Contact Person: Nouhou Diallo, President and Executive Secretary of ADR. Resident of Sougueta.

■ **AGBEF: Association Guinéenne pour le Bien-Etre Familial**

Contact persons:

- in Conakry, Dr. Bandian Sidime (Executive Director); Mr. Siba Bilivogui (Journalist)
- in Kindia, Mme. Dalonda Bah (Midwife)

The NGO "AGBF" specializes in family well-being, and is said to have a national network (source: DNE). Such an NGO could be a good candidate for discussions on curriculum development for primary schools.

■ **VGE: Volontaires Guinéens pour l'Environnement**

Contact Person: Mr. Abdoulaye Sadio Diallo

ANNEX C

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ANNEX A: Inventory of Relevant Organizations and Their EE&C Activities

In this broad inventory, some organizations were examined in depth, others were briefly considered, and the rest were merely taken into account. First, a complete list of the names of these organizations is presented. More detailed descriptions are presented in the subsequent lists:

Annex A.1: Detailed descriptions of governmental (GOG) and international organizations (or projects) involved in EE&C activities.

Annex A.2: Detailed descriptions of non-governmental organizations (NGOs) involved in EE&C activities.

Annex A.3: Brief descriptions of governmental (GOG) and international organizations (or projects) involved in EE&C activities.

Annex A.4: Brief descriptions of non-governmental organizations (NGOs) involved in EE&C activities.

List of Organizations Contacted or Identified

ADEG (Association Guineenne pour l'Environnement et le developpement) [A.4]

ADR (Association pour le Développement Rural) [A.4]

AGBEF (Association Guinéenne pour le Bien-Etre Familial) [A.4]

AGEE (Association Guineenne pour l'Education et l'Environnement)

AGPR (Association Guineenne pour la Promotion Rurale)

AGPTCL (Association Guineenne pour la Promotion du Tourisme et des Centres de Loisir)

AGUIFAC (Association Guineenne des Femmes pour l'Assainissement de Conakry)

AGUIPER (Association Guineenne pour la Promotion des Energies Nouvelles et Renouvelables)

AJUPE (Association des Jeunes Universitaires pour la Protection de l'Environnement)

ANSG (Association Nationale des Scouts de Guinee)

ASSOANE (Association des Amis des la Nature et de l'Environnement)

AVADEG (Association Guineenne pour l'Assistance au Developpement en Guinee)

CECI

CEDUST (Centre de Documentation Universitaire Scientifique et Technique)

CENAFOD (Centre Africain de Formation pour le Développement) [A.2]

CERE (Centre d'Etudes et de Recherches sur l'Environnement)

CNE (Conseil National de l'Environnement) [A.3]

COGUIREPAF (Cooperative Guineenne pour la Restauration du Patrimoine Forestier)

CRAFEE (Centre de Recherche-Action-Formation en Education à l'Environnement) [A.3]

DNE (Direction Nationale de l'Environnement) [A.1]

DNFC (Direction Nationale de Forêts et Chasse) [A.1]

DNFPR (Direction Nationale de la Formation et de la Promotion Rurale) [A.3]

DNSE (Direction Nationale des Sources d'Energies) [A.3]

DPDRE (Directions préfectorales du Développement Rural et de l'Environnement) [A.3]

EAST (Eaux - Agriculture et Sante en milieu Tropical)

EEF (Eaux - Environnement et Forets)

ENATEF (Ecole Nationale des Agents Techniques des Eaux et Forêts) [A.3]

GENAGRO (Gestion Environnement-Agronomie)

Guinée Ecologie [A.2]

IPN (Institut Pedagogique National) [A.1]

IVGE (L'Institut Supérieure Agronomique et Vétérinaire Valéry Giscard D'Estaing) [A.3]

MEPU/FP (Ministère de l'Enseignement Pré-Universitaire et de la Formation Professionnelle)

OGES (Organisation Guineenne pour l'Environnement et la Sante)

PACIPE (Programme d'Appui à la Communication et à l'Information sur la Protection de l'Environnement) [A.3]

Peace Corps

PNVA (Projet National de Vulgarisation Agricole) [A.3]

Rural Radio [A.1]

VGE (Volontaires Guinéens pour l'Environnement) [A.4]

ANNEX A.1

Detailed Descriptions of Governmental (GOG) and International Organizations (or Projects) Involved in EE&C Activities

■ DNE: Direction Nationale de l'Environnement

Context: Under the Natural Resources and Environment Ministry

Contact persons:

- Mr. Claude Gerard Coker, Directeur National Adjoint
- Mr. Sekou Sylla, Responsable du PACIPE

Mandate: Execution of the government's environmental policies, particularly in the area of natural resource management. The DNE currently 1) has a coordinating role and 2) is involved in developing national norms for industrial and agricultural pollution, respectively.

The DNE is also responsible for a subregional awareness-raising project, PACIPE, financed by the EC. Start-up date is September 1994. This project's objective is to define and implement an Action Plan for communication and information in the environmental area in collaboration with media partners and development projects.

Organization: The DNE is composed of four divisions dealing with:

- Studies and synthesis (general studies, project M&E, information analysis);
- Pollution and nuisance abatement and control (for high-risk industries, marine and coastal pollution, etc);
- Nature and resource protection;
- Environmental law, information, and education.

Comments: The DNE seems to be on target, having prepared, with the help of its deputy director, an annual workplan. The information programs it wishes to propose seem coherent with regards to external and seasonal needs.

The DNE has identified 18 environmental NGOs, of which only a few are confirmed as operational.

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Services linked directly to the Director's office:

- Jardin botanique de Camayenne
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- Offices régionaux d'aménagement forestier du Niger et Kankouré
- Projets forestiers dont PROGERFOR

Cell linked directly to the Director's Office: Cellule de planification et coordination des programmes.

Responsibilities of Division "Faune, protection du patrimoine forestier et lutte contre feux":

- Protection du patrimoine forestier et lutte contre les feux de brousse
- Chasse et Parcs nationaux
- Espaces verts et jardins biologiques

Responsibilities of Division "Foresterie Rurale":

- Animation et vulgarisation forestière
- Bois-énergie, bois de service et produits accessoires
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The DNFC directorate participates in the radio and TV program entitled "Protégeons Notre Environnement".

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Contact Person: General Director, Mr. Cheik Sylla

Type/status: "Service rattaché" au Ministère de la Communication. This special status gives the Radio Rurale more autonomy, and as "directeur général", Mr. Sylla has a little more hierarchical power than the director of Radio-Télévision Guinéenne (RTG).

Collaborating Ministries: MARA, Min. des Ressources Naturelles et de l'Environnement.

History: The Swiss have financed rural radio from its start; however, Swiss representation left Guinea in 1992. Since 1984, several Round Tables have been held, financed by USAID. Cheikh Sylla also has travelled around Africa as a recognized expert in the field.

Each of Radio Rurale's four regional stations is composed of eight persons:

- 5 animateurs (one of which is the station director, and one in each team responsible for the "environment" theme)
- 2 technicians
- 1 chauffeur

Target Populations: Populations and language groups within each of the four natural regions of Guinea.

Main purpose: To be the radio of the local rural populations, and to work on development themes. Mr. Sylla is much influenced by community radios that function in Europe.

Activities/Resources/Experience: Some of the themes rural radio has addressed: environment (bush fires) and economic development (enterprise development), including tourism, health, higher small-plot agricultural yields.

Opportunities for follow-up EE&C: Recommended first step: conduct a detailed evaluation of specific information programs linked to environmental programs.

As Radio Rurale's strong point is participative programming, it would be interesting to use the expertise there to evaluate environmental programs developed by Guinea television (RTG).

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Organization: Cellule Opérationnelle d'Education à l'Environnement

Contact Person: Mr. Lamine Barry, Coordonnateur de la Cellule

Context: Within the Institut Pédagogique National, a public institution attached to the Ministère de l'Education Pré-Universitaire et de la Formation Professionnelle.

Type/Status/Organization: IPN is structured into three large divisions:

- Curriculum and Training (Curricula et formation)
- Pedagogical support and distance learning (Appui pédagogique et enseignement à distance)
- Manuals et publications

The Cellule Opérationnelle d'Education à l'Environnement appears as one of three sections within the Curriculum and training division. The other two sections are population ("Education en matière de population") and technical education ("Education manuelle et technologique").

Size: The core team is composed of Mr. Lamine Barry, Coordonnateur de la Cellule Opérationnelle d'Education à l'Environnement; Mr. Moctar Barry; Mr. Malik Bah, responsible for documentation; Mr. Martin Cémaomi; and Mr. Thierno Hamidou Bah, Chargé d'études dans la Section Sciences Naturelles.

Target Population: Primary and secondary schools (children, teachers, and school clubs); most activities are concentrated on primary grades since these reflect the vast majority of the school population. Primary education also has become a priority for the Ministry.

Main Purpose: The three main objectives of the IPN are curriculum development (primary, secondary, and professional); elaboration of pedagogical tools (books, audiovisual, computer software); and pedagogical research. The activities of the Cellule Opérationnelle d'Education à l'Environnement began with initial European Community funding for curriculum development.

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Propre/Ecole Verte", developed in two phases: four schools the first year, four more schools the second year. There were five experimental areas within this program:

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1993-1994—Elaboration of an Action Plan; collaboration on a training seminar for future counselor-trainers (conseillers formateurs), who were originally agronomists, foresters, teachers, and members of NGOs. Activities within the framework of the PASE program, with 25 pilot rural schools involved.

Other resources:

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The Cellule has access to a Vidéomobile which belongs to UNICEF and which rotates among eight primary schools.

Opportunities for Follow-up EE&C:

Projects being developed—The IPN Director is heading a committee examining different action-research (Recherche-Action) activities. One objective is to determine whether EE can be a way of integrating the school into its environment, and involving the school children's parents.

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The future CRAFEE institute will have one similar objective within its overall mandate to train future animateurs.

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Contact Person: Ben Sekou Sylla, Executive Director

Activities: Pilot training programs in 14 CRDs where counseling and training focuses on:
1) democratization and decentralization; 2) legal codes; 3) land tenure; 4) CRD finances; and
5) project development.

CENAFOD also has worked on a primary school book and teacher's guide (FED Project). CENAFOD will try to develop a functional literacy program geared to environmental issues. The hope is to train local literacy agents.

■ **Guinée Ecologie**

Contact Person: Mamadou Saliou Diallo, Executive Director

Activities/Resources/Experience: Has benefitted mostly from voluntary support from both European and Guinean members. Concretely it has benefitted from the experience of two projects: a European Community-funded project for the management of a protected island that is a reproductive site for certain species of sea turtles; the other is a second attempt at elaborating Guinea's National Environmental Action Plan. This latter project gave the NGO an international status and notoriety. Because of this experience, this NGO is now developing a new mandate (as yet to be approved by its governing board) geared towards two purposes: education and awareness-raising on environmental questions; and development of partnerships and a network of NGOs.

Opportunities for follow-up EE&C: Guinée Ecologie, because of its established political credibility, might be able to play a role in facilitating a national EE&C strategy. Indeed, what is crucial at the present time, is knowing how to get programs approved at the highest levels of government, given that many ministries are at a standstill as the country waits for restructuring of the government.

ANNEX A.3

Brief Descriptions of Governmental (GOG) and International Organizations (or Projects) Involved in EE&C Activities

■ **CNE: Conseil National de l'Environnement**

Created in 1987

Objective: Coordinate and create some coherence among activities at different levels (national, regional, and cross-institutional).

Structure: The permanent secretariat of the CNE is currently managing the Pilot Committee of the NEAP (PNAE).

■ **CRAFEE: Centre de Recherche-Action-Formation en Education à l'Environnement**

This center will be set up by the MEPU/FP as the first teachers' college for environmental education (in Pita). It also will propose training of animateurs in field research and assessment.

This project may be financed by the PASE (Programme d'Ajustement Sectoriel pour l'Education).

■ **DNFPR: Direction Nationale de la Formation et de la Promotion Rurale**

Context: Ministry of Agriculture and Animal Resources (MARA).

Manages a training center (Centre de formation de Tindo).

■ **DNSE: Direction Nationale des Sources d'Energie**

Context: Under the Natural Resources and Environment Ministry.

Mandate: Responsible for the dissemination of improved woodstove programs; is overseeing the "Projet de développement et de promotion des foyers améliorés domestiques" which began in 1992 with the support of the FED.

■ **DPDRE: Directions Préfectorales du Développement Rural et de l'Environnement**

Mandate: Executes, at the prefectoral level, the policies of the M.A.R.A. within the agricultural, rural development (génie rurale), animal husbandry, fisheries, forests, and the environment in general.

■ **ENATEF: Ecole Nationale des Agents Techniques des Eaux et Forêts**

Context: Depends upon the Ministère de l'Enseignement pré-universitaire et de la Formation Professionnelle.

History: Created in 1992, with Swiss aid.

Structure:

- Three-year program, with 25 students for each class (promotion);
- Has one department specialized in extension work (vulgarisation), with one course on EE.

Activities:

- Establishing new programs with local project partners (Mamou préfecture);
- Responsible for managing the local forêt classée (Mamou), which was suffering regular poaching and pillaging by the local population;
- A hands-on program for developing a strategy to manage this forest, reduce population encroachment, and sensitize specific cross-sections of the local population (students, farmers, etc.).

■ **IVGE: L'Institut Supérieure Agronomique et Vétérinaire Valéry Giscard D'Estaing**

Context: Under the Ministère chargé de l'enseignement supérieur.

Address: Located in Faranah.

Mandate: Trains, in five years, future "ingénieurs" for agriculture, animal husbandry, forestry, and rural development ("génie rurale").

■ **PACIPE: Programme d'Appui à la Communication et à l'Information sur la Protection de l'Environnement**

Essential vector and principle support (in terms of material, logistics and financing) of the education and awareness-raising purposes of the NEAP.

■ **PNVA: Projet National de Vulgarisation Agricole**

Context: Ministry of Agriculture and Animal Resources (MARA)

The PNVA is a project under the direct authority of the General Secretariat of the MARA. This project is scheduled to progressively extend itself to the total national territory: it is now covering four regions, 19 préfectures, 127 sous-préfectures (out of 168), and 625 districts (out of 1,002). The extension system applied is the T&V (Training and Visitation) approach. This network is composed of 650 field agents and 41 specialized technicians for whom continuing education is proposed at regional agricultural research centers as well as within specialized development projects (such as the GERF in Mamou, for the theme "Gestion des terroirs"). This project's monitoring and evaluation

(M&E) is based on internal evaluation of its operations. It is expected that the PNVA will pick up M&E activities normally taken care of by the DPDRE.

ANNEX A.4

Brief Descriptions of Non-governmental Organizations (NGOs) Involved in EE&C Activities

■ **ADEG: Association Guineenne pour l'Environnement et le developpement**

Specialized in identifying and assembling traditional tales which can be used within schools for promoting environmental themes. Recognized by the DNE.

■ **ADR: Association pour le Développement Rural**

Mamou préfecture

Address: s/c projet GERF, Mamou.

Contact Person: Nouhou Diallo, President and Executive Secretary of ADR. Resident of Sougueta.

■ **AGBEF: Association Guinéenne pour le Bien-Etre Familial**

Contact persons:

- in Conakry, Dr. Bandian Sidime (Executive Director); Mr. Siba Bilivogui (Journalist)
- in Kindia, Mme. Dalonda Bah (Midwife)

The NGO "AGBF" specializes in family well-being, and is said to have a national network (source: DNE). Such an NGO could be a good candidate for discussions on curriculum development for primary schools.

■ **VGE: Volontaires Guinéens pour l'Environnement**

Contact Person: Mr. Abdoulaye Sadio Diallo

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Schedule for Phase I																						
	Week 1							Week 2							Week 3							
	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	
Contact/work with USAID, DNE appointees																						
Facilitate final phase of NEAP process																						
Arrange meeting to evaluate EE&C support activities																						
Reassess Media Specialist's training needs																						
Contact/interview potential candidates for co-training with Media Specialist																						
Assess Radio Rurale needs																						
Prepare training workshop, materials & sites																						
Facilitate training workshop																						
Contact other potential partners																						
Assess coherence of information sources and published materials																						
Develop other predetermined and potential themes																						
Prepare and evaluate next ongoing Action Plan																						

Schedule for Phase II																					
	Week 1							Week 2							Week 3						
	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
Work with USAID, DNE appointees																					
Evaluate monitoring and progress during interim period																					
Contact/interview potential candidates for co-training with Media Specialist																					
Prepare training workshop, materials & sites																					
Facilitate training workshop																					
Work on coherence of information sources and published materials																					
Work on capacity-building																					
Do marketing towards potential actors and contributors																					
Develop other predetermined and potential themes																					
Prepare and evaluate next ongoing Action Plan																					

Schedule for Phase III																					
	Week 1							Week 2							Week 3						

	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
Work with USAID, DNE appointees																					
Evaluate monitoring and progress during interim period																					
In-depth assessment of radio prog. & strategies where they have taken place																					
Prepare training workshop, materials & sites																					
Facilitate training workshop																					
Work on coherence of information sources and published materials																					
Work on capacity-building																					
Do marketing towards potential actors and contributors																					
Develop other predetermined and potential themes																					
Establish case studies and procedures for M&E																					
Prepare and evaluate next ongoing Action Plan																					